**P123**

## IMPACT OF CEREBROVASCULAR RISK FACTORS OVER THE EVOLUTION OF DEMENTIA DUE TO ALZHEIMER'S DISEASE IN A SAMPLE OF PATIENTS WITH LOW SCHOOLING FROM SÃO PAULO, BRAZIL

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**Objectives:** To evaluate the impact of cerebrovascular (CV) risk factors over the rate of progression of Alzheimer's disease (AD) in patients with low schooling.
**Methods:** From 129 patients with AD, 103 who had already scored 20 on the Mini-Mental State Examination (MMSE) were classified into two groups: patients scoring 20 within <=3 years, or >3 years after disease onset. Additionally, 56 patients who had already scored 15 were divided into two groups: patients scoring 15 within <=4 years, or >4 years after disease onset. Also, 80 patients with a score >1.0 on the Clinical Dementia Rating (CDR) were allocated into two groups: patients reaching >1.0 within <4 years, or >=4 years after disease onset. Patients were assessed for gender, schooling (<=8 years, or >8 years), age of estimated disease onset (<70 years, or >=70 years), number of CV risk factors (>=3, or <3, among hypertension, diabetes *mellitus*, hypercholesterolemia, alcoholism and smoking), weight (>=70kgf, or <70kgf), body mass index (BMI >=30kg/m$^2$, or <30kg/m$^2$) and waist circumference (>=102cm, or <102cm). *Chi*-square was used for statistics, ρ<0.05.
**Results:** For all patients (87 female and 42 male), mean estimated age of disease onset was 72.4±6.2 years (range 60-88), while mean schooling was 4.43±3.71 years (range 0-15), mean weight was 63.5±12.9 kgf (range 33-98), mean height was 156.5±9.5 cm (range 134-183), and mean waist circumference was 95.1±12.3 cm (range 64-126). Gender (ρ=0.41), age at disease onset (ρ=0.89), BMI (ρ=0.33), weight (ρ=0.09) and waist circumference (ρ=0.17) had no influence over the rate of progression to MMSE=20. For patients who had already scored 15 on the MMSE, neither gender (ρ=0.89), nor age at disease onset (ρ=0.75), BMI (ρ=0.53), weight (ρ=0.38) or waist circumference (ρ=0.22) were significant. Considering CDR>1.0, there were no significant results for gender (ρ=0.71), age at disease onset (ρ=0.38), BMI (ρ=0.47), weight (ρ=0.18) or waist circumference (ρ=0.46). Cumulative CV risk was non-significant for reaching CDR>1.0 (ρ=0.099), MMSE=20 (ρ=0.158) or MMSE=15 (ρ=0.212). Low schooling was the only significant factor for faster reaching CDR>1.0 (ρ=0.036) and MMSE=15 (ρ=0.014), but not MMSE=20 (ρ=0.539).
**Conclusion:** Lower schooling, but not CV risk, had a significant effect for a faster rate of progression of AD, assessed by way of MMSE and CDR scores.

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